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**BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES**

MAILED  
NOV 28 2007  
GROUP 17C

Application Number: 09/909,288  
Filing Date: July 19, 2001  
Appellant(s): FOLEY ET AL.

Laura R. Grunzinger  
For Appellant

**EXAMINER'S ANSWER**

This is in response to the appeal brief filed 9/4/07 appealing from the Office action  
mailed 5/3/07.

**(1) Real Party in Interest**

A statement identifying by name the real party in interest is contained in the brief.

**(2) Related Appeals and Interferences**

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

**(3) Status of Claims**

The statement of the status of claims contained in the brief is correct.

**(4) Status of Amendments After Final**

No amendment after final has been filed.

**(5) Summary of Claimed Subject Matter**

The summary of claimed subject matter contained in the brief is correct.

**(6) Grounds of Rejection to be Reviewed on Appeal**

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

**(7) Claims Appendix**

The copy of the appealed claims contained in the Appendix to the brief is correct.

**(8) Evidence Relied Upon**

5,202,050	CULSHAW ET AL	4-1993
5,821,214	WEIBEL ET AL	10-1998
6,194,362	TRINH ET AL	2-2001

<b>WO99/24539</b>	<b>KASTURI ET AL</b>	<b>5-1999</b>
<b>JP60-141,800</b>	<b>ISHIMATSU ET AL</b>	<b>7-1985</b>
<b>JP8-151597</b>	<b>NORITAKE ET AL</b>	<b>6-1996</b>

### **(9) Grounds of Rejection**

Note that, at the outset, it should be noted that in the Office action mailed 5/3/07, the Examiner inadvertently listed claims 57 and 58 as rejected under 35 U.S.C. 103(a) as being unpatentable over JP 60-141,800 in view Culshaw et al (US 5,202,050), JP 8151597, Weibel et al (US 5,821,214), and Trinh et al (US 6,194,362) as applied to claims 57 and 58 above, and further in view of WO99/24539. Claims 57 and 58 had already been rejected and clearly, the rejection should have read claim 63 is rejected under 35 U.S.C. 103(a) as being unpatentable over JP 60-141,800 in view Culshaw et al (US 5,202,050), JP 8151597, Weibel et al (US 5,821,214), and Trinh et al (US 6,194,362) as applied to claims 57 and 58 above, and further in view of WO99/24539. The reference '539 was relied upon for its teaching of propylene glycol butyl ether as a solvent material and the correction in the rejection heading has been made as set forth below.

The following ground(s) of rejection are applicable to the appealed claims:

Claims 57 and 58 are rejected under 35 U.S.C. 103(a) as obvious over JP 60-141,800 in view Culshaw et al (US 5,202,050), JP 8151597, Weibel et al (US 5,821,214), and Trinh et al (US 6,194,362).

'800 teaches a liquid detergent composition containing 0.1 to 10% by weight of a swellable clay mineral, 0.1 to 30% of a solvent, 1 to 20% of a surfactant and 0.5 to 30% of an alkali agent. Suitable solvents include diethylene glycol monobutyl ether, etc.

See page 4, lines 10-50. Note that, amine oxide surfactants and monoethanolamine may also be used in the compositions. See page 9, lines 1-30. Suitable additional ingredients include fragrances, dyes, etc. See page 6, lines 1-15. These compositions are used for removing soils from ovens, glass, refrigerators, and other kitchen items. See page 3, lines 1-10. The product of the invention may be used as-is, and an aerosol or spray-type product is also appropriate from the standpoint of ease of use. See page 6, lines 1-10.

'800 does not specifically teach a synthetic laponite clay having a particle size of less than 100 nm, xanthan gum, and an odor masking perfume comprising an ionone nor a cleaning composition having the specific physical parameters containing a solvent, a synthetic laponite clay with a particle size of less than 100 nm, xanthan gum, and odor masking perfume comprising an ionone, and the other requisite components of the composition in the specific proportions as recited by the instant claims.

Culshaw et al teach safe and effective hard-surface cleaning compositions which contain a binary mixture of an organic solvent and a narrowly defined chelating agent. See Abstract. Suitable organic solvents include benzyl alcohol, 2-(2-butoxyethoxy)ethanol, 1-(2-n-butoxy-1-methylethoxy)propane-2-ol, etc., and can be used in amounts of from 1% to 20%. See column 5, lines 1-30. In addition to the essential chelating agent/solvent binary mixture, the compositions can contain

additional ingredients such as surfactants and suitable surfactants include anionic, nonionic, cationic, amphoteric, and zwitterionic surfactants. See column 5, lines 45-69. Also, thickeners may be used in the compositions in amounts from 0.2% to 1.5% and include xanthan gums, smectite clays, etc. See column 6, lines 55-69. Highly desirable ingredients for use include hydrotropes such as monoethanolamine, diethanolamine, triethanolamine, etc. See column 6, lines 15-35. The pH of such compositions will generally be in the range of from 5 to 11. See column 7, lines 50-60.

'597 teaches liquid detergent compositions containing a clay mineral having an average particle size of 10 to 5000 nm and anionic and nonionic surfactants. These minerals include montmorillonite, saponite, smectite and swelling mica. See Abstract.

Weibel teaches a hard surface scouring cleaner composition comprising from 0.5 to 10% of soft abrasive articles, from 0.5 to 2.5% of a chlorine-containing bleach, from 0.2 to 3% of a thickening system comprising from 0.2 to 3% based on the weight of the composition of a cross-linked polyacrylate resin and from 0 to 2.5% of a synthetic smectite clay, from 0.25 to 3% of a bleach stable surfactant system, from 0 to 3% of an electrolyte, and a sufficient amount of sodium or potassium hydroxide to provide a pH in the range of 11.5 to 13.5. See Abstract. The preferred synthetic smectite clays are sold under the trademark Laponite and particularly useful are Laponite RD and Laponite RDS. Note that, these are the same as the laponite materials listed as the gel forming and sol forming materials on page 13, lines 10-35 of the instant specification and the Examiner asserts that these Laponite clay materials as taught by Weibel would have the same layer structure as recited by the instant claims. The addition of the synthetic clay

provides improved stability, particularly over long time periods. See column 5, lines 30-55.

It would have been obvious to one of ordinary skill in the art, at the time the invention was made, to use a synthetic laponite clay in the composition taught by '800, with a reasonable expectation of success, because Weibel et al teach the that the use of a synthetic laponite clay thickener in a similar cleaning composition which provides improved stability the composition, particularly over long time periods, and further, '800 teaches the use of smectite clays in general.

It would have been obvious to one of ordinary skill in the art, at the time the invention was made, to use a synthetic laponite clay having a particle size of less than 100 nm in the cleaning composition taught by '800, with a reasonable expectation of success, because '597 teaches the use of smectite clay having a particle size of less than 100 nm in a similar detergent composition and '800 in combination with Weibel et al teach a composition containing synthetic laponite clays.

It would have been obvious to one of ordinary skill in the art, at the time the invention was made, to use xanthan gum in the cleaning composition taught by '800, with a reasonable expectation of success, because Culshaw et al teach the equivalence of smectite clays to xanthan gum in a similar cleaning composition and further, '800 teaches the use of thickening agents such as swellable clay minerals including smectite-type clay minerals.

Trinh et al teach liquid aqueous, hard surface detergent compositions having improved cleaning and good filming/streaking characteristics comprising from about

0.0015 to about 3% of a blooming perfume composition comprising at least about 50% of blooming perfume ingredients selected from the group consisting of perfume ingredients having a boiling point of less than about 260 degrees Celsius; from about 0.001% to about 2% of a detergent surfactant; from about 0.5% to about 30% of a hydrophobic solvent, and the balance being an aqueous solvent system comprising water and a solvent such as methanol, ethanol, isopropanol, ethylene glycol, propylene glycol, glycol ethers, etc. See column 1, line 55 to column 2, line 30. Suitable perfumes include blooming perfume ingredients and extensive mixtures of perfumes, including ionone, which encompass the blooming perfumes and ionones as recited by the instant claims. See column 6, line 10 to column 10, line 1.

Suitable glycol ethers include monopropylene glycol monopropyl ether, diethyleneglycolmonohexyl ether, monoethyleneglycol monobutyl ether, etc. See column 14, lines 54-65.

It would have been obvious to one of ordinary skill in the art, at the time the invention was made, to use a perfume comprising an ionone as recited by the instant claims in the composition as taught by '800, with a reasonable expectation of success, because Trinh et al teach a similar hard surface cleaning composition containing a perfume comprising an ionone further '800 teach the use of optional components including perfumes.

With respect to the flow viscosity, shear thinning properties, pH, and other physical parameters as recited by the instant claims, the Examiner asserts that the broad teachings of '800 in combination with Culshaw et al, Weibel et al, Trinh et al, and

'597 would encompass compositions having the same flow viscosity, shear thinning properties, pH, and other physical parameters as recited by the instant claims because '800 in combination with Culshaw et al, Weibel et al, Trinh et al, and '597 suggest compositions containing the same components in the same proportions as recited by the instant claims.

It would have been obvious to one of ordinary skill in the art, at the time the invention was made, to formulate a detergent composition used in a spray dispenser having the specific physical parameters containing a solvent, a synthetic laponite clay having a particle size of less than 100 nm, a xanthan gum, perfume comprising an ionone, and the other requisite components of the composition in the specific amounts as recited by the instant claims, with a reasonable expectation of success and similar results with respect to other disclosed components, because the broad teachings of '800 in combination with Culshaw et al, Trinh et al, '597, and Weibel et al suggest a detergent composition used in a spray dispenser having the specific physical parameters containing a soil swelling agent, a synthetic laponite clay having a particle size of less than 100 nm, xanthan gum, perfume comprising an ionone, and the other requisite components of the composition in the specific amounts as recited by the instant claims.

Claim 63 is rejected under 35 U.S.C. 103(a) as being unpatentable over JP 60-141,800 in view Culshaw et al (US 5,202,050), JP 8151597, Weibel et al (US 5,821,214), and Trinh et al (US 6,194,362) as applied to claims 57 and 58 above, and further in view of WO99/24539.

'800, Culshaw et al, Weibel et al, JP 8151597, and Weibel et al are relied upon as set forth above. However, none of the references teach the use of propylene glycol butyl ether in addition to the other requisite components of the composition as recited by instant claim 63.

'539 teaches a method of softening soil deposited on a hard surface. The method comprises contacting a hard surface having soil with a composition having a soil softening additive incorporated into the composition. The compositions may be formulated at either high or low pH and preferred soil softening additives are amylase enzymes. See Abstract. The hard surface may be plates, glasses, cutlery, pots, pans and other surfaces such as kitchen countertops, sinks. Metal surfaces, tiles, bathtubs, floors, etc. See page 3, lines 1-10. The compositions may include one or more buffering agents such as monoethanolamine, diethanolamine, triethanolamine, etc., and the buffering agent may be present from 0.1 to 15% by weight of the composition. See page 14, line 15 to page 15, line 25. Solvents may also be used in the compositions and include ethanol, propanol, benzyl alcohol, propylene glycol butyl ether, diethylene glycol monobutyl ether, etc. See page 18, line 5 to page 22, line 30.

It would have been obvious to one of ordinary skill in the art, at the time the invention was made, to use propylene glycol butyl ether in the composition taught by '800, with a reasonable expectation of success, because '539 teaches the equivalence of propylene glycol butyl ether to diethylene glycol monobutyl ether in a similar cleaning composition and further, '800 teaches the use of diethylene glycol monobutyl ether.

**(10) Response to Argument**

With respect to the rejection instant claims 57 and 58 under 35 USC 103 using JP 60-141800 in view of Culshaw et al, JP 8151597, Weibel et al, and Trinh et al and rejection of claim 63 under 35 USC 103 using JP 60-141800 in view of Culshaw et al, JP 8151597, Weibel et al, and Trinh et al, and further in view of WO 99/24539, Appellant states that the Examiner's reliance upon many of the secondary references as "similar" and their teaching of the equivalence of one component to another is flawed. Further, Appellant states that an expectation of equivalence is not merely created by a recitation in a Markush group and more discussion or "teaching" in the reference must be present for the equivalency rational to hold water. Specifically, with respect to Culshaw et al and WO99/24539, wherein Culshaw et al teaches the use of smectite clays and xanthan gum as thickeners and '539 teaches the use of propylene glycol butyl ether and diethylene glycol monobutyl ether as solvents, Appellant states that the listing of these components together in a Markush group by each of the references does not create a presumption that the components are equivalent for purposes of a rejection under 35 USC 103(a).

With respect to Appellant's assertion that the recitation in a Markush group does not create an equivalence conclusion of one component to another, the Examiner asserts that in the cleaning and detergent field, the listing of several components in a Markush group useful in the composition as thickeners (smectite clays and xanthan gum) or solvents (propylene glycol butyl ether and diethylene glycol monobutyl ether), for example, does create a presumption that these materials are equivalent as thickening or solvent materials. The fact that the prior arts lists these materials as

suitable for the same use and purpose means that the prior recognizes that these materials are functional equivalents. Further, the Examiner asserts that one of ordinary skill in the art looking at such a reference would recognize that these materials are equivalents for their disclosed intended use within such a composition and would have a reasonable expectation of success and similar properties when using each component listed under the same Markush group; it is not necessary that the prior specifically state that these materials are equivalents and the Examiner asserts that the equivalency is implicit since the materials are all listed together as surfactants, solvents, thickeners, builders, etc., and would be expected to have similar or equivalent physical properties. Note that, an express suggestion to substitute one equivalent component or process for another is not necessary to render such substitution obvious. In re Fout, 675 F.2d 297, 213 USPQ 532 (CCPA 1982). See MPEP 2144.06.

Further, the Examiner asserts that it would have been obvious to one of ordinary skill in the art to use mixtures of components which are taught together in a Markush group as suitable thickeners, solvents, etc., with a reasonable expectation of success, because one of ordinary skill in the art would expect that each component taught together would have similar properties and produce similar results in relation to the other components of the Markush group. Note that, it is *prima facie* obvious to combine two compositions each of which is taught by the prior art to be useful for the same purpose, in order to form a third composition to be used for the very same purpose. The idea of combining them flows logically from their having been individually taught in

the prior art. In re Kerkhoven, 626 F.2d 846, 850, 205 USPQ 1069, 1072 (CCPA 1980).

See MPEP 2144.06.

Additionally, Appellant states the primary reference, JP 60-141800, along with the secondary references relied upon, Culshaw et al (US 5,202,050), JP 8151597, Weibel et al (US 5,821,214), Trinh et al (US 6,194,362), and WO99/24539 are not analogous prior art relative to the claimed invention. Note that, in order to rely on a reference as a basis for rejection of an applicant's invention, the reference must either be in the field of applicant's endeavor or, if not, then be reasonably pertinent to the particular problem with which the inventor was concerned. See MPEP 2141.01(a). In the present case, the primary reference, JP 60-141800 is drawn to cleaning surfaces and more specifically, is directed to cleaning hard surfaces such as those found in kitchen which can be applied as a spray-type product (See page 6, lines 1-10 of '800). Cleaning and more specifically, the cleaning of hard surfaces using a spray-type dispenser is in the same field of endeavor and same problem with which Appellant was concerned. Therefore, the Examiner asserts that '800 is analogous prior art with respect to the claimed invention.

Further, the Examiner asserts that the secondary references relied upon are properly combinable with '800 and are drawn to the same field of endeavor as the claimed invention and '800 since these references are also drawn to cleaning compositions and more specifically, cleaning hard surfaces. Thus, the Examiner asserts that Culshaw et al (US 5,202,050), JP 8151597, Weibel et al (US 5,821,214), Trinh et al (US 6,194,362), and WO99/24539 are all analogous prior art relative to JP

60-141800 and that one of ordinary skill in the art clearly would look to the teachings of Culshaw et al (US 5,202,050), JP 8151597, Weibel et al (US 5,821,214), Trinh et al (US 6,194,362), and WO99/24539 to cure the deficiencies of JP 60-141800.

**(11) Related Proceeding(s) Appendix**

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,



Gregory R. Del Cotto

Conferees:

Greg Mills

~~James Seidell~~

~~Harold Rymer~~

APPEAL CONFeree



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